

# VocoPro

ULTIMATE CHOICE OF KARAOKE ENTERTAINMENT

o w n e r ' s m a n u a l

## DA-2200

### Professional Digital Key Control Karaoke Mixer

#### Excellent Features:

- > 11 Step Digital Key Controller
- > Professional Digital Echo with Repeat and Delay Controls
- > Multi-audio Control
- > Twin Stereo Audio/Video Inputs allow Two Separate A/V Sources to be used
- > Music Bass, Treble and Volume Controls
- > Microphone Master, Bass and Treble Controls
- > 19" Rack Mountable Design
- > Echo On/Off Switch on all Three Mic Channels



## CAUTION

### RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated **dangerous voltage** within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of **important operating and maintenance (servicing) instructions** in the literature accompanying the appliance.

#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

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## DA-2200 Professional Digital Key Control Karaoke Mixer

### SPECIFICATIONS

#### Graphic Equalizer Section:

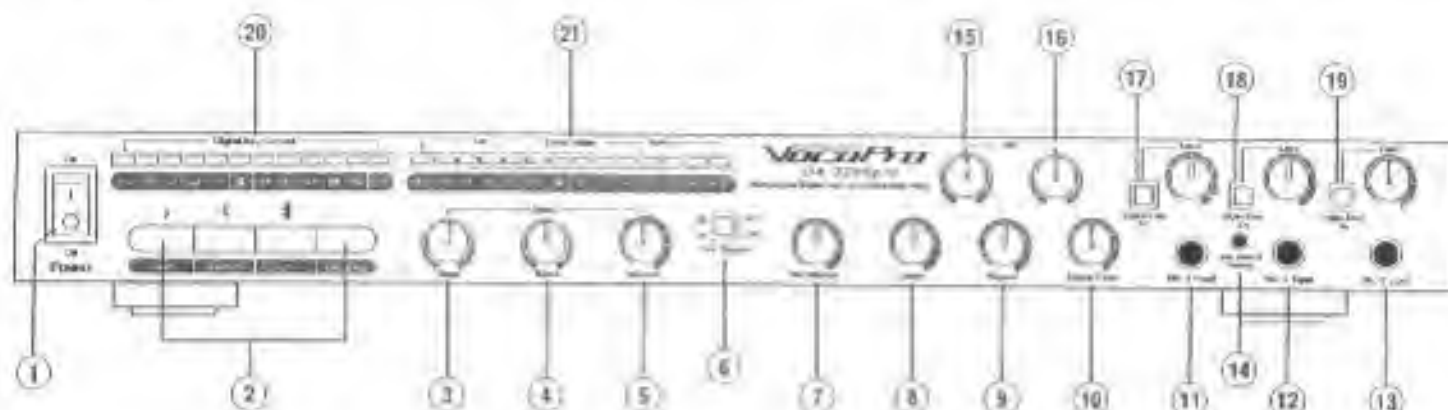
Connector	RAC / Unbalanced
Input Impedance	47k
Bands	1 1/3 ISO Spacing
Range	+/- 15dB
T.H.D.	<0.01%
Frequency Response	20Hz-20KHz 0.5dB
Noise Ratio	>90dB

#### Mic Section:

Connector	1/4 TRS / Unbalanced
Input Impedance	1.5k
T.H.D.	<0.1%
Frequency Response	20 Hz-15KHz -3dB
Noise Ratio	>88dB
High	+/-15dB
Mid	+/-15dB
Mid Freq.	250 Hz-6KHz
Low	+/-15dB
Digital Echo	Up to 300ms

# DA-2200 Professional Digital Key Control Karaoke Mixer

## Front Panel



(1) **POWER BUTTON:** Turns on the power to the DA-2200PRO.

### (2) KEY CONTROL:

**Flat Key** (down or  $\flat$ ): Press this key to LOWER the pitch of the song selection being played. This feature lowers the pitch of the song one half-step for each time it is pressed, to as many as five half-steps. The flat keys part of the Key Control feature and will work with the external players when properly connected to the DA-2200PRO. **Note:** The Key Control feature will not change the tempo of the song being played.

**Natural Key** ( $\natural$ ): Press the natural key once to RETURN the pitch of song selection being played to its natural key or pitch. This natural key is part of the Key Control feature and will work with the external player when properly connected to the DA-2200PRO. **Note:** The Key Control feature will not change the tempo of the song being played.

**Sharp Key** (up or  $\sharp$ ): Press this key to RAISE the pitch of the song selection being played. This feature raises the pitch of the song one half — step for each time it is pressed, up to five half-steps. The sharp key is part of the Key Control feature and will work with the external player when properly connected. The Key Control feature will not change the tempo of song being played.

**Multiplex:** The Multiplex feature works only with discs recorded in the Multiplex format. It will delete the vocal track on Multiplex CDs or tapes.

(3) **MUSIC BASS CONTROL:** This controls the amount of bass in the music being played.

(4) **MUSIC TREBLE CONTROL:** This controls the amount

of treble in the music being played.

(5) **MUSIC MASTER:** Turn left to turn down or turn off the source music. Turn right to turn up the source music.

(6) **A/V SOURCE:** Press this to select both audio and video between the two input sources you wish to play (DVD, CDG).

(7) **MIC MASTER:** Use this control to adjust the overall volume of all the microphones.

(8) **MIC DELAY:** Adjusts the length of each interval of the Digital Echo effect.

(9) **MIC REPEAT:** Adjusts the interval repetition of the echo effect.

(10) **MIC ECHO LEVEL CONTROL:** Adjusts the Digital Echo parameters for the overall amount of digital effect on the mic channels.

(11) **MIC1 INPUT:** Microphone input jack for 1st microphone.

(12) **MIC2 INPUT:** Microphone input jack for 2nd microphone.

(13) **MIC3 INPUT:** Microphone input jack for 3rd microphone.

(14) **KEY CONTROL REMOTE:** Connection for key control microphone (changes key remotely—sold separately). Do not use the remote for any other purpose as doing so may damage the unit.

(15) **MIC BASS:** These controls are used to boost or cut the low frequency response of the microphones.

(16) **MIC TREBLE:** These controls are used to boost or cut the high frequency response of microphones.

(17) **DIGITAL ECHO (ON/OFF):** Turn on the Digital Echo On or Off for the mic1 input.

(18) **DIGITAL ECHO (ON/OFF):** Turn on the Digital Echo On or Off for the mic2 input.

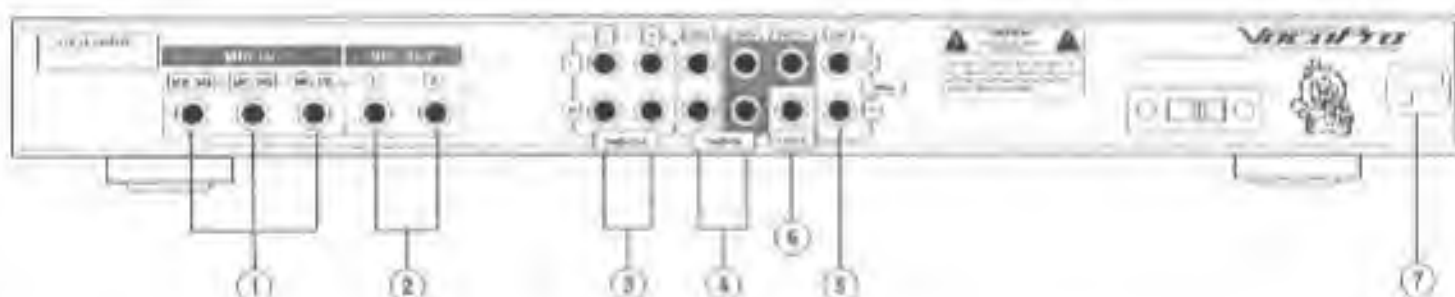
(19) **DIGITAL ECHO (ON/OFF):** Turn on the Digital Echo On or Off for the mic3 input.

(20) **STEREO KEY CONTROL DISPLAY:** Displays the number of half - steps up (+) or down(-) you have chosen. When the display reads zero (0) you are in the song's natural key.

(21) **LEVEL METER:** Displays overall volume level from both the music and the microphone.

## DA-2200 Professional Digital Key Control Karaoke Mixer

### Rear Panel



(1) **REAR MICROPHONE INPUT JACKS A, B AND C:** Six microphones can be connected at the same time with both the front and rear microphone input jacks.

(2) **STEREO MICROPHONE ECHO EFFECT OUTPUT JACKS:** Outputs the digital echo effects without mixing the music, so the unit can work as an independent digital echo processor when connected to another mixer or a laser karaoke player.

(3) **AUDIO OUTPUT JACKS (1 and 2):** Outputs (pre-out) the mix sound between the microphone and the music, connect to the AUX/INPUT jacks of a power amplifier or a pre-amp.

(4) **AUDIO INPUT JACKS:** Connect these jacks to the audio output jacks of up to two source players. (DVD player, CDG player.)

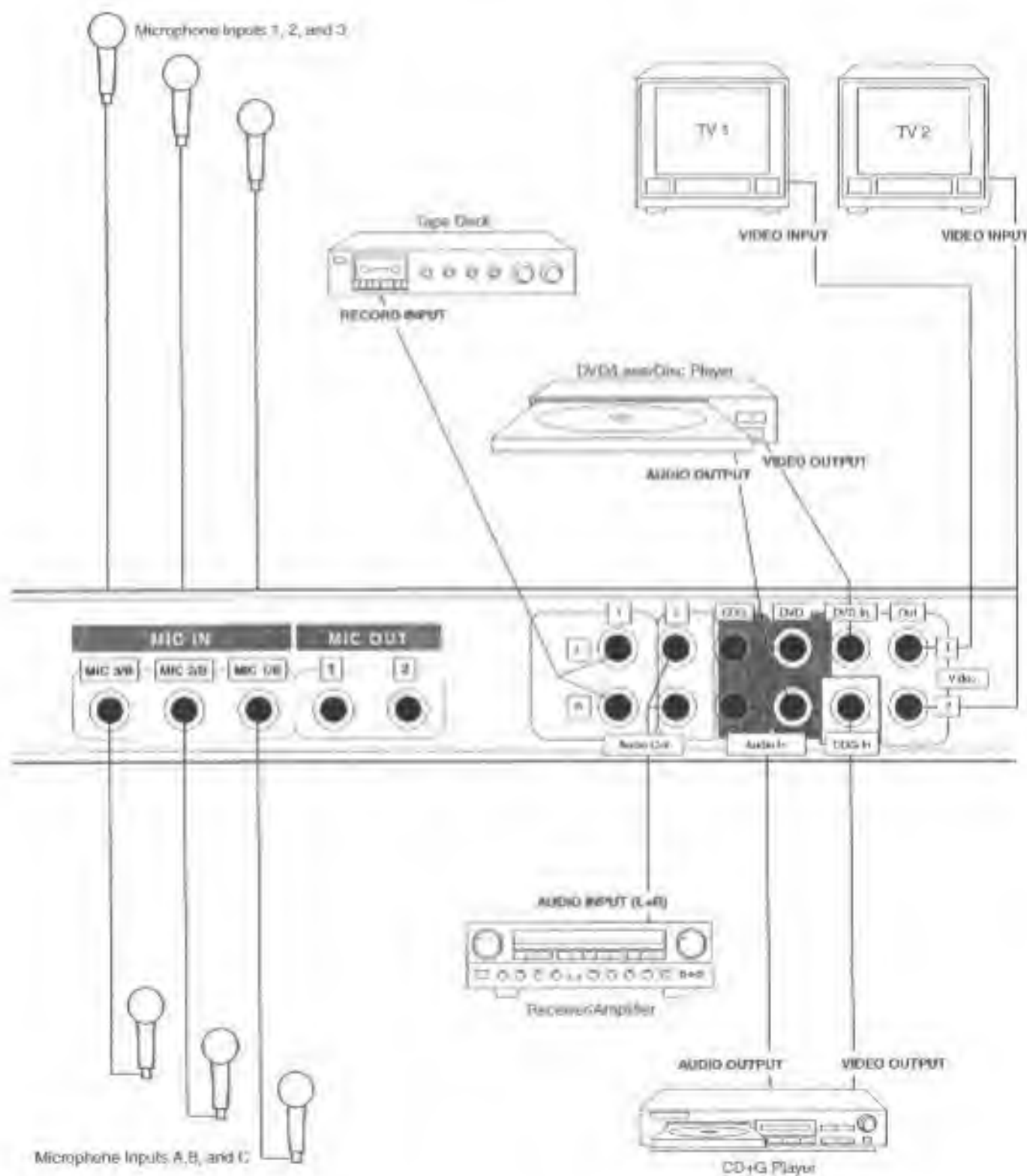
(5) **VIDEO OUTPUT JACKS:** Connect these jacks to the Video Input jacks of up to two TV monitors.

(6) **VIDEO INPUT JACKS:** Connect these jacks to the video output jacks of up to two source players. (DVD player, CDG player.)

(7) **VOLTAGE SELECTOR:** Use these selectors to select between different input voltage. 110V — For U.S. Systems. 220V — For European Systems.

# DA-2200 Professional Digital Key Control Karaoke Mixer

## Rear Panel CONNECTIONS



# DA-2200 Professional Digital Key Control Karaoke Mixer

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
1. No Sound	✗ No Power	✗ Connect the power cord and turn on the power.
	✗ Music or microphone level is set too low	✗ Turn up the music volume for both the right and left channels (see 2 of page 2 of the manual) or turn up the master microphone volume (see 5 of page 2 of the manual) or turn up the individual microphone level controls (see 9 of page 2 of the manual).
	✗ Input source not switched correctly	✗ Select to the proper input from the input sources selector (see 11 of page 2 of the manual).
	✗ Receiver / AMP not switched correctly	✗ Check the receiver's input switch and make sure it is switch properly. Then turn up the volume of the receiver.
	✗ Improperly connected	✗ Check the connections page of the manual, make sure that all the inputs and outputs are properly connected.
2. Vocal sound distorted	✗ The microphone's parametric equalizer is not properly	✗ Set the microphone's High and Low EQ at middle, and turn the Mid-EQ to max. Then sing into the microphone, and adjust the Mid-sweep until the desire frequency of the vocal is found. Turn down the Mid-EQ, sing into the microphone again, and turn up or down the high and Low EQ, until the desire vocal sound is found.
3. Music can only be heard from one side of the speaker	✗ One side of the music level is not turn on	✗ Turn on both sides of the music volume by sliding both music level control up.
4. Vocal can only be heard from one side of the speaker	✗ The microphone pan control is set to one side	✗ Turn the microphone pan control to the center.
5. No echo	✗ Echo on/off button is at off position.	✗ Turn on the echo on/off button.
6. The guided vocal can not be cancelled	✗ The CD or tape is not a Karaoke Multiplex disc or tape.	✗ Check and make sure it is a karaoke disc or tape.